Foreign direct investment in Morocco

Jamal Bouoiyour

Agence Française de Développement and Institut Français des Relations Internationales

2004

Foreign Direct Investment in Morocco[1]

Jamal Bouoiyour
jamal.bouoiyour@univ-pau.fr
CATT, Université de Pau et des Pays de l'Adour, Avenue du Doyen Poplawski, F - 64000 Pau

2004

Abstract
In this paper, we first compare the characteristics of Moroccan and foreign manufacturing firms between 1987 and 1996, and finds, as expected, that the latter perform better in terms of productivity, are technologically more advanced and more export-oriented, and pay higher wages than the former. Second, based on ongoing research, we suggest that foreign presence may have a positive impact on Moroccan productivity but that the relationship depends on local absorptive capacity or the technological gap (*i.e.* distance between foreign and local firms in terms of total factor productivity). It would appear that the larger the technological gap, the greater the spillover, up to a certain point. One interesting implication is that the effects of FDI may vary greatly across industries. This line of research deserves further investigation and may call for more appropriate sectoral policy response to foster spillovers between foreign and local firms.

Key words: FDI, Technological gap, Spillovers.

[1] Published in "Foreign Direct Investment in Developing Countries: *Leveraging the Role of Multinationals"*. Edited by Serge Perrin and Frédérique Sachwald. Agence Française de Développement and Institut Français des Relations Internationales

1. Introduction

Many developing countries now actively solicit foreign investment, offering income tax holidays, import duty exemptions and subsidies to foreign firms, as well as measures like market preferences, infrastructures and sometimes even monopoly rights. The reason for subsidising these firms is the positive spillovers from transferring technology to domestic firms. In fact, foreign direct investment (hereinafter FDI) not only plays an important part in creating jobs but is also viewed as a source of income. Yet the strong argument in favour of public support for FDI is based on the prospect for knowledge spillovers. Indeed, FDI offers an opportunity to obtain foreign capital without assuming the debt-related risk.

Despite the controversies surrounding the benefits and cost of FDI, a number of developing countries'governments have now changed their policies from restricting to promoting foreign investment.

Annual flows of FDI now exceed USD 700 billion and the total stock exceeds USD 6 billion. Over the past decade, FDI flows have grown at least twice as fast as trade (Meyer, 2003). Moreover, FDI is geared primarily to developed countries and secondarily to a few developing countries (the so-called emerging countries). In 1968 for example, 31% of FDI went to developing countries. In 1983, the OECD estimated that two-thirds of FDI had been invested in industrialised countries. In 1988-89, the developing countries' share was a mere 17% (Bouoiyour and Hattab-Christman, 1994).

During the periods 1980-1989 and 1990-1998, FDI to Sub-Saharan Africa grew by 59%, to East Asia and Pacific by 942% and to Latin America by 455% (World Bank, 2000). In 2001 and 2002, the developing countries' share was 25.4% and 24.9%, respectively (UNCTAD, 2003).

As a case study, Morocco is interesting for two reasons. First, Morocco has been one of the preferred targets of FDI in the MENA (Middle East and North African) countries[2]. It should be noted, however, that the MENA countries are not popular FDI destinations: in 2002 for example, FDI inflows totaled a scant 0.34 of GDP, the lowest such figure for any region in the developing world[3].

[2] The MENA countries are Algeria, Egypt, Iran, Israel, Jordan, Morocco, Oman, Syria, Tunisia and Turkey.

[3] Sub-Saharan Africa (SSA), which is often regarded as one of the poorest regions in the world, has attracted more FDI than the MENA region during the past decade; 2.19% of GDP in 2002 (Onyeiwu, 2003).

Second, Morocco's experience is especially useful in drawing inferences for other less developed countries. The country is viewed as a good « pupil » by the World Bank and the IMF. The aim of this paper is to examine the trends for FDI flows to Morocco and to explore the determining factors and their impact on the Moroccan economy.

2. The Development of Foreign Direct Investment in Morocco

Before proceeding further, it could be of interest to go through the FDI series used in this paper. Hence in Table 1, we present the average value of the FDI inflows received by Morocco from 1960 to 2001. Similarly, Table 1 reports the ratios of total FDI inflow to Gross Domestic Product (GDP) and Gross Fixed Capital Formation (GFCF). GDP's share of gross FDI inflows has grown from an average of 0.34% during the 1960s and 0.61% in the 1970s, to 0.67% in 1980s, reaching 2.17% in the 1990s. In 2001, this ratio skyrocketed to 8.64%. If we look at FDI's average share of GFCF, the trends look even more impressive: 2.84 during the sixties, 3.06 during the seventies, 3.19 in the eighties and 9.72 in the nineties. In 2000 and 2001, the ratio of GFCF to FDI was 14.66 and 38.09, respectively.

Table 1: FDI trends for 1960 – 2001 (in USD million)

	1960-69*	1970-79*	1980-89*	1990-99*	2000	2001
FDI	6.46	52.87	112.90	715.46	1172.3	2915.1
%GDP	0.34	0.61	0.67	2.17	3.52	8.64
%GFCF	2.84	3.06	3.19	9.72	14.66	38.09
%EU	-	-	34	68	70	80

Source: CD-ROM IMF 2004 for GDP, exchange rate (Dirham/USD) and GFCF, IMF (2004), Office de Change and Banque du Maroc for data on FDI. * Average for the decade.

Moreover, the sector-based distribution of FDI shows that until recently (1996), manufacturing industries occupied the first rank (27 % between 1983 and 1996). Construction came in second with 20%, followed by the financial sector with 12 %, while tourism was ranked 4th with 7 % for the same period. Between 1996 and 1998, the financial sector experienced buoyant growth, but manufacturing industries remained in first place. The last three years have seen a telecommunications boom with the privatization of the sector.

In 2001 for example, telecommunications accounted for more than 84% of the total, whereas manufacturing occupied second place with 8%. Trade came in third with 3%.

As regards the origin of FDI, Europe in general and France in particular occupy first place. The EU's share rose from 34 % of total FDI in the 80s to 68 % in the 90s. This ascendancy of European FDI is a new phenomenon, contrary to what can be noticed for foreign trade. The Arabic countries (Saudi Arabia and United Arab Emirates) have seen their share stagnate.

3. Institutional Context

With regard to the policies adopted by the different Moroccan governments, it is important to mention that the first major step came in 1973, when the government passed the «Moroccanisation » decree restricting foreign ownership of certain industrial, commercial, and services activities to 49 %. The main purpose of this policy was political rather than economic - to reduce the dominant role of French firms in the Moroccan economy. Activities falling under the « Moroccanisation » law included textiles, clothing, footwear, leather products, travel goods, toys, fish canning and preserving, fertilisers, edible oils, vegetables fibres and processed fruit and vegetables. The negative impact of this law on foreign investment is evident from the fact that even enterprises not subjected to the law voluntarily handed over their capital share to their Moroccan partners.

The exceptional growth of FDI inflows in the nineties can be explained by the first positive effect of the Structural Adjustment Program (SAP) adopted in 1983 under the aegis of the IMF and the World Bank and by the adoption of new policies as regards trade and foreign investment.

Thus, it was the adjustment plan of 1983 - and the accompanying complementary measures relating to a more open and flexible economy - that ushered in a radical change in Moroccan's strategy of economic development. Indeed, since 1983, the Moroccan strategy as regards foreign investment has been characterized by a relative clarification of choices which has been materialised by the adoption of incentives and measures to attract

foreign investment. One such measure was the promulgation of a new code of investments in 1983. This instrument allowed full foreign ownership of Moroccan companies in certain sectors (especially manufacturing), eased restrictions on the repatriation of capital and dividends, and introduced fiscal and other incentives for

FDI. The code guaranteed (i) foreign investment against the risks of nationalisation and expropriation; (ii) unlimited transfer of dividends and profits to foreign investors; and (iii) the repatriation of foreign investors' capital and related capital gains. The investment code was further liberalised in 1988, administrative procedures

governing the approval of FDI were simplified and rules similar to those granted to non-resident foreigners were extended to non-resident Moroccans (Haddad and Harrison, 1993). The 1983 code was replaced in 1995 by a single document called the « Investment Charter ». Adopted in October 1995, this instrument replaces the

complex eight-part framework of the 1983 Investment Code (except for the agricultural sector). This single text determines the fundamental aims of the State's action for the ten years to come with a view to the development and the promotion of investments through the improvement of investment conditions, an increase in the number of tax breaks and the introduction of investment incentives. The legislative and regulatory texts necessary for the achievement of these aims were presented in the 1996 Finance Law. Moreover, a privatization programme was launched in 1989 and stepped up in 1993.

In December 1989, the Moroccanisation Decree of 1973 was eliminated for all sectors. However, limits on the share of foreign participation continued to apply in a few sectors outside of manufacturing. In 1993, Dirham convertibility was introduced for routine operations, and in 1996 Morocco signed a partnership agreement

with the European Union (free trade area). In 2002, Moroccan authorities established one-stop investment centres (« guichet unique » or regional investment centers, CRI) were established by Moroccan authorities. This initiative is very important because it takes 13 permits to open a business in Morocco (as compared with 10 in India and 3 in Thailand for example). The average number of days it takes to start a business is 57 in Morocco (30 in China and Thailand)[4].

In response to this policy change, FDI inflows - insignificant in the 1970s - began to increase steadily in 1985-86 (see Table 1).

In short, we can see that:

i) The implementation of the SAP yielded interesting results with regard to the inflow of FDI.

ii) With the policy of economic openness and stabilization, the amount of FDI has increased tremendously and its nature have changed with the growing power of the telecommunications and banking sectors.

ii) The EU's increasingly dominant role with regard to FDI viewed from the perspective of the creation of the free trade area.

[4] World Bank (2002)

4. The Determining Factors of Foreign Direct Investment

In his paper on «the determining factors of foreign direct investment in Morocco», Bouoiyour (2003a.) provides evidence that the intense and growing inflow of FDI to the Moroccan economy has constituted one of the defining features of Moroccan economic development in recent years. This flow of capital in the form of direct investment has picked up since Morocco's adjustment plan was implemented or more precisely since the results of this plan began to be felt from 1985 onwards.

In fact, the main regression results indicate that, in respect to the hypothesis of the neo-classical model, FDI is explained by the differences in relative factor endowments (labour costs) and to a lesser degree by the variables suggested in the more recent theories, namely human capital. This latter variable is significant but its coefficient is low in comparison to labour costs. Human capital is an essential factor in the location strategies of multinational firms that have chosen Morocco to invest. These results confirm the ones published by the World Bank (FACS). The World Bank survey ranks skilled labour third (after low labours cost and the proximity of European markets) with regard to criteria leading foreign investors to opt for Morocco.

The late nineties were marked by an exceptional increase in FDI inflows. Indeed, FDI has reached the symbolic threshold of $3 billion, largely due to the privatization of Maroc Telecom. Other privatisations had preceded this one, notably those of the SAMIR and SCP refineries as well as the sale of the second GSM license in 1999. Thank to these privatisations but also to loan note conversions, FDI has literally exploded in recent years. However, if we look at FDI inflows without privatization, we find modest sums (less than USD 500 million in average in the last ten years). This observation shows that the Moroccan economy must continue with the reforms.

It is true that Morocco has entered a new era of economic liberalization but also an era of controlled inflation, budget deficits, exchange rate fluctuations, etc.

During the 1970s, the Moroccan government expanded growth via heavy public spending, financed through foreign borrowing and rising receipts from phosphate exports. This culminated in a major payment crisis in 1983. The eighties were marked by a slowdown in GDP growth (3.8 % on average for the decade). As a result, the government introduced

outward-oriented structural adjustment measures designed to eliminate the bias against exports, liberalised imports, and enhanced the allocative role of the financial sector.

The recovery process for public finances that was initiated in 1983 has yielded noteworthy results: in particular, the government deficit did not exceed 3% of GDP in 1992. In 2003, Morocco returned to the capital markets. A loan – allotted to finance debt repurchasing – has been subscribed in very favourable conditions. This is the result of the stabilisation policy which has led to a healthy economic situation. Active debt management efforts have proved successful and Morocco is now able to meet its obligations without difficulty. Morocco has acquired so much credibility that international lenders no longer require any guarantees. Morocco's improved credit rating confirms the international organisations' positive view of the situation of the Moroccan economy.

The foreign exchange policy has also been successful despite the caution shown by the Moroccan authorities[5].

In conclusion, it would appear that the strategy adopted by the Moroccan authorities has proved its worth, leading to a high level of investment and a reduction of the deficit and indebtedness.

All in all, these observations concerning the improvement of the economic environment, the exchange rate, inflation, and so on have been confirmed by Bouoiyour (2003a). Indeed, he finds that the variable inflation is significant, with the expected sign. This result suggests that macroeconomic stability is an important determinant of the inflow of investments. The ratio of national investment to GDP has a positive effect on GDP, i.e. foreign and domestic investments are complementary. The exchange rate is also significant, as a depreciation of the real exchange rate in relation to the currency of the investing country increases FDI inflows.

The democratisation process is following its course and the results will not be long in coming. FDI inflows can only accelerate and help the country to develop. In this respect, Morocco can set a good example for other North African countries or for developing countries in general. Besides, Morocco is considered to be a good « pupil » by the international finance bodies (World Bank and IMF).

[5] By the end of the 90s, the real exchange rate had appreciated significantly in relation to the EU15 countries, leading to a corresponding decrease in the competitiveness of the exposed sectors. The lack of competitiveness of Moroccan products should have compelled authorities to devalue the currency several years ago. Instead, they preferred to concentrate their efforts on consolidating the financial system and lightening the debt burden. It was not until April 2001 that the authorities devalued de facto the value of the DH by 5 %. In fact, they modified the weighting of the various currencies which compose the basket by giving greater importance to the Euro to the detriment of the US dollar, so as to reflect better Morocco's ties to the Euro zone.

The creation of the Europe-Mediterranean Free Trade Area offers an opportunity to develop business co-operation, but does not suffice to ensure that Morocco's exports remain competitive on EU markets characterised by growing competition Moreover, very important obstacles remain that hinder the development process.

- Economic growth is uneven and remains very dependent on rainfall even though this dependency tended to diminish at the end of the nineties and the beginning of 2000. During the nineties, growth was under 3% in average. This poor showing is due to the importance of the agricultural sector (16% of GDP) and to its inability to respond to climate-related shocks (because of the low proportion of irrigated farmland – a scant 14% – and because of farms' small size and lack of equipment) which have become more and more frequent. This weak growth is also due to the size of the agricultural population, which is as large as the urban population. The main consequence of this is that any fall in agricultural income has repercussions on global demand.
- Education is also a very serious problem which jeopardises the future of the country. It is true that Morocco has at its disposal a skilled and cheap labour force in certain sectors, but the educational level of the population as a whole remains low (50% of the Moroccans are illiterate).

Three strategic sectors (Textile and Clothing Products, Electronic Equipment and Chemical Products) have been identified by the Moroccan authorities, the European Union and World Bank (FACS- *Firm Analysis and Competitive Survey*) as offering real potential in terms of competitiveness, export growth and FDI inflows.

However, as the World Bank pointed out in 2002, the problem in Morocco is that, at the current exchange rate, wages are too high for textiles to compete. Neither the workforce nor the firms have the skills to be competitive in these three strategic sectors or the like[6].

Moroccan firms have always pursued a strategy consisting to rely on low tech, low quality and low skills in a protected market. With liberalisation and openness, the country has to move to higher value-added/skill-intensive and high-wage industries. In other words, the quality of the labour force must be moved up.

[6] As regards the firms in the Moroccan sample, the World Bank (2002) indicates that less than 10% export, indicating their lack of competitiveness.

5. FDI and Spillovers

By the 1990s, Moroccan manufacturing – like the economy as a whole – was doing poorly, in sharp contrast to what was happening with Morocco's rivals, such as Tunisia, China or Thailand. Not very long ago Morocco was richer than China. Today, real income in China is about one-seventh higher than in Morocco (World Bank, 2002). Moroccan industry accounted for 30 per cent of GDP in 2000, a proportion that has not changed for a long time. Moreover, the industrial sector is represented by the mining industry, energy, manufacturing, construction and civil engineering. Processing (or manufacturing) industries represent a small share (18 per cent in 2000) of overall production on account of phosphate's domination. Even though the manufacturing industries represented more than 84 per cent of total exports in 1998, Morocco's competitiveness in this very labour-intensive sector remains weak. In the textile sector – clothes for example – Morocco's productivity is the same as China's and hardly higher than India's. However[7], wages in the Moroccan firms were twice as high as in China and four times as high as in India in 2000 (World Bank, 2002).

To analyse the effect of the foreign presence on the Moroccan firms, we have used data for the period 1987-1996 (18 sectors) compiled from the Moroccan Ministry of Trade and Industry database (see appendix).

Table 2. Labour productivity, Average wage, Exports of Foreign and Moroccan firms, and Technology gap (1987-1996)

	Labour Productivity (LP)	Avergae Wage (AW)	Exports (Xport)	Technology Gap (TP)
Total industry	1.7*	1.6*	7.26*	3.7*

*significant at 5%. They are the performance ratios expressed by LP, AW, Xport and TG. LP (AW, Xport) is foreign firms labour productivity (average wage, exports) divided by Moroccan firms labour productivity (average wage, exports). TG is the technology gap between foreign firms and Moroccan firms.

Source: Moroccan Ministry of Trade and Industry database and Bouoiyour (2003b, 2003c).

A comparative analysis of the economic performances of the Moroccan and foreign industrial firms yields very interesting results. Indeed, we have calculated four ratios which characterize

[7] The cost of the labour force (ratio of average income in relation to average added value) is 0.40 in Morocco as compared with 0.23 in China, 0.21 in India and 0.30 in Thailand.

the sector-based performances of Moroccan and foreign industrial firms. The first ratio concerns the labour productivity (LP) of foreign firms in relation to the labour productivity of the Moroccan firms. The LP is given by total added value per worker. The second ratio concerns the average wage of the foreign firms in relation to the average wage of the Moroccan firms (AW), *i.e.* personnel costs divided by the number of workers. The third ratio concerns exports divided by the added value of the foreign firms in relation to that of the Moroccan firms (Xport). We have also calculated the technology gap as defined by Wang and Blömstrom (1992), i.e. the ratio of TFP between the foreign firms and their Moroccan counterparts (TG)[8].

As expected, the crucial premise of this kind of study is that MNCs are more technologically advanced than domestic firms. Table 2 gives preliminary findings from our data and indicates the existence of statistically significant differences between the labour productivity of foreign and domestic firms. The former are, on average for the ten years analysed (1987-1996), 1.7 times more productive than the latter[9].

As expected, the crucial premise of this kind of study is that MNCs are more technologically advanced than domestic firms. Table 2 gives preliminary findings from our data and indicates the existence of statistically significant differences between the labour productivity of foreign and domestic firms. The former are, on average for the ten years analysed (1987-1996), 1.7 times more productive than the latter.

Table 2 reports that during the period under view, the wages paid by foreign firms were 1.6 times higher on average than the wages paid by the domestic firms. During the same period, exports were 7.26 times higher for the foreign firms.

Table 2 also highlights the technology gap. For the whole industries, this ratio stands at 3.7. In other words, the foreign firms are 3.7 times more technologically advanced than the Moroccan firms. These results confirm those for labour productivity. These foreign firms are more productive (in terms of labour productivity and TFP), more geared to the outside world and paid higher wages than Moroccan firms.

Bouoiyour (2003b) examines the relationship between foreign presence and labour productivity in the Moroccan manufacturing industries. He confirms that the MNCs' presence

[8] Thus if the LP ratio is superior to 1, it would mean the foreign firms are more productive than the Moroccan firms (in terms of labour productivity). Just as if Export ratio is superior to 1, it would mean that the foreign firms export more than the Moroccan firms. Last but not least, if the average wage is superior to 1, it shows that the average wage distributed by the foreign firms is superior to that distributed by the Moroccan firms.

[9] In the case of Portugal for example, this result becomes 2.13 (between 1996 and 1998). See Proença *et a*l (2000).

can impact positively on the productivity of the host country. However, this relationship is a complex one and depends on absorptive capacity or the technology gap. In fact, spillover diffusion increases or stabilizes with the gap. However, when the technology gap becomes high, the coefficient of spillovers decreases. The occurrence of positive spillovers is not clear because they do not increase linearly with the foreign presence. Consequently, the technology gap seems to be a condition for spillovers, but only within a certain range.

These results are in line with the idea that the benefits of the MNCs' presence do not affect host country firms equally.

Bouoiyour (2000c) finds that spillovers only occur in low-tech sectors[10]. In high-tech sectors, the foreign presence decreases indigenous labour productivity, thereby confirming that the foreign presence does not affect local productivity equally in all industries.

6. Conclusion

From a policy perspective, this is a potentially important result. Significant sums of public money are spent on attracting FDI. It is often taken as a given in the literature that FDI and foreign presence stimulate indigenous productivity and foster the economic development of the host country. Notwithstanding, this linkage is very complex and depends on the technological capabilities gap.

Instead, it is crucial that policy-makers and managers focus on the circumstances that influence the extent of spillovers and attract more FDI. These can be specific conditions, including characteristics of investors, local firms, human capital and the policy framework. Policy-makers must bridge the distance (in term of productivity) between foreign and domestic firms to create a positive spillovers. The government can oblige that foreign investors to help domestic firms to achieve real technology transfers and increase learning ability. In fact, foreign investors let such spillovers depend on their opportunity costs of sharing the knowledge and the transaction costs of establishing barriers to knowledge flows[11].

[10] To obtain the high-technology group, we aggregate the OECD's medium- and high-tech sectors. Then, High-technology sectors are Machinery and Equipment, Transport Materials, Electric and Electronic Equipment, Office Machines and Precision Equipment, Chemical and Parachemical Products, Rubber and Plastic and Other Industrial Product. Low-technology sectors are Food Products, Other Food Products, Beverage and Tobacco, Textile Products, Clothing (except shoes), Leather and Shoes, Wood Products, Paper and Printing, Mineral Products, Basic Metal and Metallic Products. See appendix.

[11] The case of STMicroelectronics (ST) is very interesting. In fact, ST is the largest foreign employer in Morocco and currently employs some 4,900 people in its three factories in the Casablanca region. In the process, it has developed one of the world's most advanced automated semiconductor assembly plants. In 2003, ST inaugurated its new IC design and software development centre in Rabat. Initially, the Rabat plant will focus on IC design for digital consumer applications, in particular digital TV, DVD players, flat-screen displays and digital still and video cameras and the development of customer

The current question of determining the «optimal» policies that the government can implement to attract FDI and extend spillovers is to be answered, because the impact of MNCs on host economies is not well understood.

References

BOUOIYOUR, J. (2003a), "The Determining Factors of Foreign Direct Investment in Morocco ", 10th Economic Research Forum, Annual Congress, The World Bank, Marrakech.

BOUOIYOUR, J. (2003b), "Labour Productivity, Technological Gap and Spillovers : Evidence From Moroccan Manufacturing Industries ", WPCATT, University of Pau.

BOUOIYOUR, J. (2003c), "Productivity and spillovers diffusion in Morocco : Is there a difference between high tech and low tech sectors ? ", WP-CATT, University of Pau.

BOUOIYOUR, J. and M. HATTAB-CHRISTMANN (1994), " Les flux d'investissements directs étrangers au Maroc ", *Annales Marocaines d'Economie*, 8.

BOUOIYOUR, J. et S. TOUFIK (2003), ''Productivité des industries manufacturières marocaines et investissements directs étrangers'', *Critique Economique*, n° 9.

HADDAD, M. and A. HARRISON (1993), "Are there positive spillovers from direct foreign investment ? Evidence from panel data for Morocco", *Journal of Development Economics* 42.

MEYER, K. E. (2003), "FDI spillovers in emerging markets: A literature review and new perspectives ", mimeo, Copenhagen Business School.

ONYEIWU, S. (2003), "Analysis of FDI flows to developing countries : Is the MENA region different ? '', 9th Economic Research Forum, Annual Congress, The World Bank, Sharjah.

PROENÇA, I., M. P. FOUNTOURA and N. GRESPO (2002), "Productivity spillovers from multinational corporations in the Portuguese case: Evidence from a short time period panel data ", mimeo, University of Lisbon.

UNCTAD (2003), *World Investment Report*, Geneva.

WANG, J. and M. BLOMSTRÖM (1992), "Foreign investment and technology transfer ", *European Economic Review*, 36.

WORLD BANK (2002), "Moroccan manufacturing sector at the turn of the century ", FACS-MOROCCO 2002.

application software. The scope of the centre's activities will be extended over time to include the development of embedded systems and broad applications, with the aim of establishing expertise in this field in Morocco. ST is confident that the emerging generation of Morocco engineers can make an important contribution to the development of state-of-the-art silicon chips, and that plants will employ 150 designers by the end of 2004.